



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,271	11/20/2001	Michael C. Smyk	FCI-2632/C3069	9590
48580	7590	07/28/2005	EXAMINER	
WOODCOCK WASHBURN, LLP ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			HARVEY, JAMES R	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/989,271

**Applicant(s)**

SMYK, MICHAEL C.

**Examiner**

James R. Harvey

**Art Unit**

2833



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 45-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2833

## DETAILED ACTION

### *Claim Cancellation*

The cancellation of claims 55-58 is made of record.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.

-- In reference to Claim(s) 45-54, the recitation "wherein the flexible contact element is not attached to the contact section when the female electrical terminal is mated with a complementary male terminal" is not shown.

### *Claim Objections*

- Claim(s) 45-54 are objected to because of the following informalities:

-- In reference to the newly amended claim language added to each of the independent claims "wherein the flexible contact element is not attached to the contact section when the female electrical terminal is mated with a complementary male terminal", it is not clear how the contact element is not attached because it is joined to the walls of the contact section and captured within the contact section (see inserted definition from The American Heritage Dictionary).

If one skilled in the art threw the terminal, the contact element would stay with the terminal. If the contact element was not attached, it would not stay with the thrown terminal and

Art Unit: 2833

fall to the ground; in the same manner that a pebble of sand not attached to a baseball would land on the ground near the picture's feet when the baseball is thrown.

For purposes of examination, it is assumed that the language is intended to mean "is movable in any direction within the contact section". An examination based on the merits, as best understood, is addressed below.

-- Appropriate response to the above is required.

## at tached

---

### pronunciation

*adj.*

1. *Architecture*. Joined to or by a wall, especially by sharing a wall with another building; not freestanding: *a block of attached houses*.

2. *Biology*. Living in a permanently fixed state in the adult stage, as the barnacle.

*The American Heritage Dictionary of the English Language*, © Houghton Mifflin Company 2003 ①

APA | MLA | Chicago : Citing this entry

attached. *The American Heritage® Dictionary of the English Language* (2003). Retrieved 15 July 2005, from xreferplus. <http://www.xreferplus.com/entry/4063170>

*Claim Rejections - 35 USC § 102*

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

\*\* Claim(s) 45-54 are rejected under 35 U.S.C. 102(b) as being anticipated by FCI's Jumbo PV Receptacle (applicant's IDS dated January 25, 2002).

-- In reference to Claim(s) 45, FCI shows (see examiner's figure)

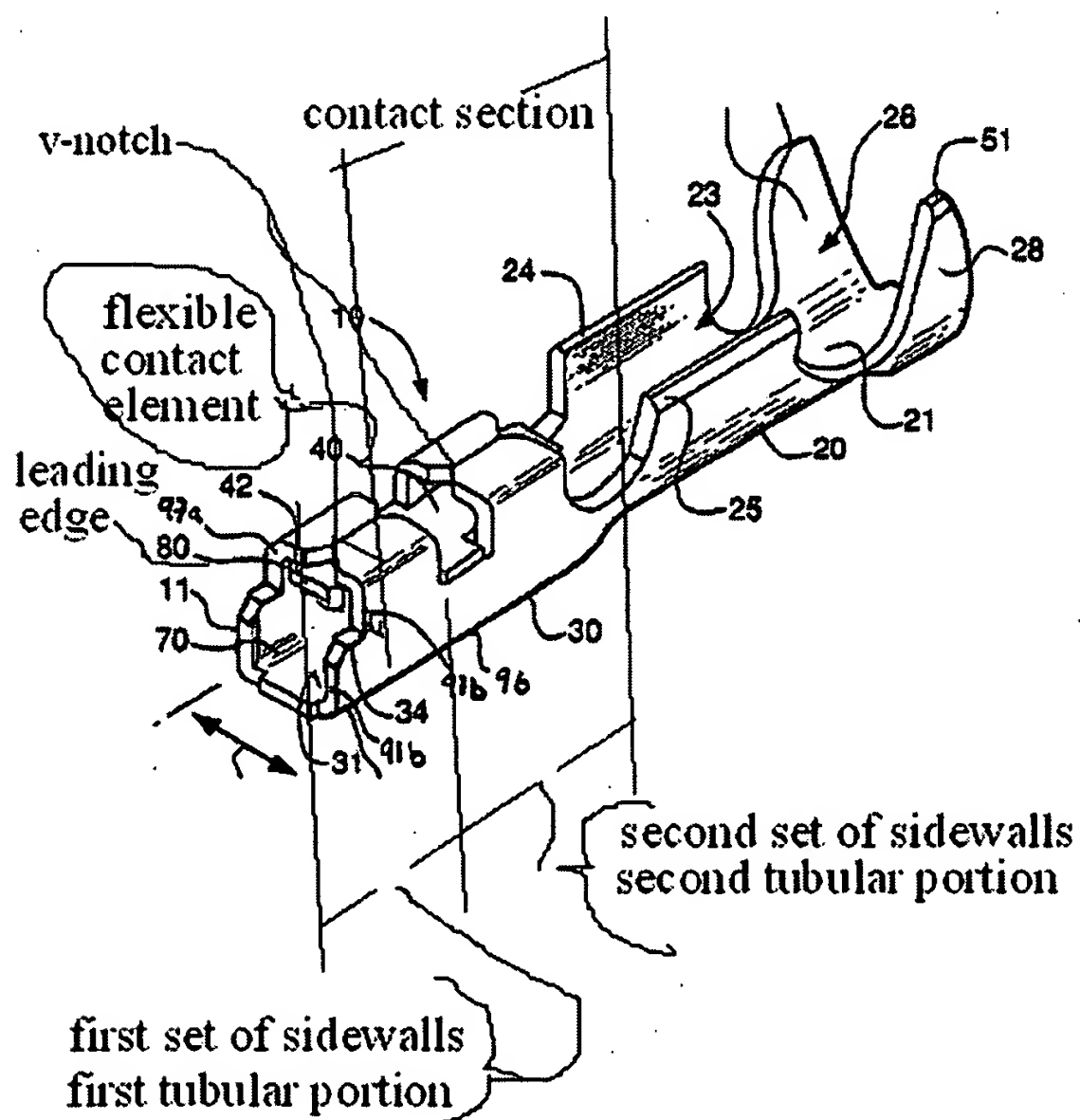
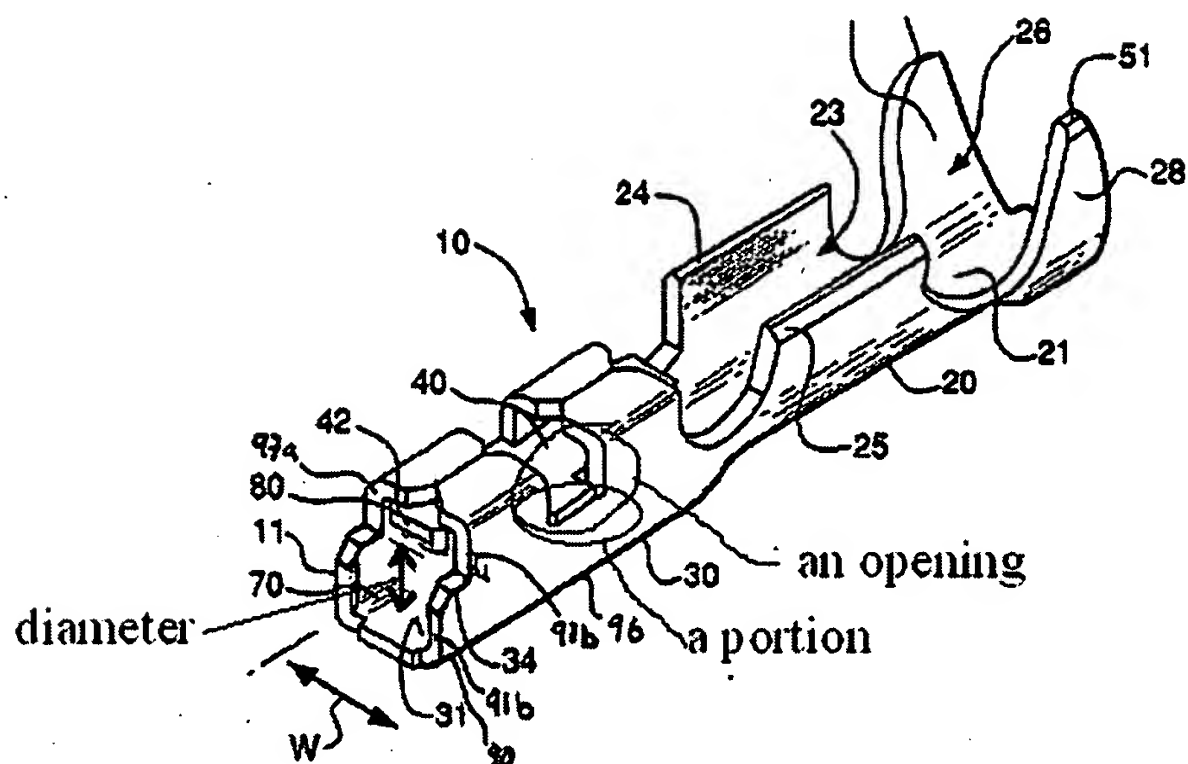
a contact section for mating with a complementary male terminal, the contact section including a bottom wall;

a first set of sidewalls 18 that define a first tubular portion with the bottom wall; and a second set of sidewalls 14, which are longer than the first set of sidewalls, that define a second tubular portion with the bottom wall, the second tubular portion arranged end to end with the first tubular portion; and

a flexible contact element 10 at least partially disposed within the contact section in a non-fixedly secured manner for urging a complementary male terminal into engagement with the bottom wall.

Art Unit: 2833

-- In reference to the recitation "wherein the flexible contact element is not attached to the contact section when the female electrical terminal is mated with a complementary male terminal", FCI is seen to show the same structure that captures the contact element within the mating portion of the terminal and makes the recitation unpatentable.



-- In reference to Claim(s) 46, FCI shows (see examiner's figure) the flexible contact element includes a leading edge (see examiner's figure) that is positioned outside of the contact section.

-- In reference to Claim(s) 47, FCI shows (cover sheet) the flexible contact element includes a leading edge (see examiner's figure), and wherein the female electrical terminal is devoid of any structure prohibiting frontal access to the flexible contact element leading edge (see examiner's figure).

-- In reference to Claim(s) 48, FCI shows (see examiner's figure)

a contact section for mating with a complementary male terminal, the contact section including a first tubular portion comprising a first set of sidewalls; and

a second tubular portion comprising a second set of sidewalls and being arranged end to end with the first tubular portion;

a geometrically central axes of the first and second tubular portions are misaligned; and

a flexible contact element at least partially disposed within the contact section in a non-fixedly secured manner for urging a complementary male terminal into engagement with the bottom wall.

-- In reference to the recitation "wherein the flexible contact element is not attached to the contact section when the female electrical terminal is mated with a complementary male terminal", FCI is seen to show the same structure that captures the contact element within the mating portion of the terminal and makes the recitation unpatentable.



-- In reference to Claim(s) 49, FCI shows (cover sheet) the flexible contact element includes a leading edge that resides outside of the contact section.

-- In reference to Claim(s) 50 and 53, FCI shows (cover sheet) the flexible contact element includes a leading edge (see examiner's figure), and wherein the female electrical terminal is devoid of any structure prohibiting frontal access to the flexible contact element leading edge.

-- In reference to Claim(s) 51, FCI shows (see examiner's figure) an opening (see examiner's figure) is defined at an interface between the first tubular portion and the second tubular portion; and a portion (see examiner's figure) of the flexible contact element extends into the opening.

-- In reference to Claim(s) 52, FCI shows

a contact section for mating with a complementary male terminal, the contact section including a first tubular portion comprising a first set of sidewalls; and

a second tubular portion comprising a second set of sidewalls and being arranged end to end with the first tubular portion;

the first tubular portion has an effective diameter (see examiner's figure) that is a different size than that of the second tubular portion; and

a flexible contact element at least partially disposed within the contact section in a non-fixedly secured manner.

-- In reference to the recitation "wherein the flexible contact element is not attached to the contact section when the female electrical terminal is mated with a complementary male terminal", FCI is seen to show the same structure that captures the contact element within the mating portion of the terminal and makes the recitation unpatentable.

Art Unit: 2833

-- In reference to the recitation "diameter" it is seen to be defined by a distance across any configuration ( see inserted definition below ).

-- In reference to Claim(s) 53, it is addressed above with claim 50.

-- In reference to Claim(s) 54, FCI shows (cover sheet)

a contact section including a set of converging sidewalls ( first tubular portion ) that define an insertion pathway for a complementary male terminal, the insertion pathway having a diameter (see examiner's figure) that is smaller than a tubular portion (second tubular portion) that is proximate the set of converging sidewalls; and

a flexible contact element partially disposed within the contact section in a non-fixedly secured manner for urging a complementary male terminal into engagement with a contact section bottom wall;

wherein the female electrical terminal is devoid of any structure prohibiting frontal access to the flexible contact element leading edge.

-- In reference to the recitation "wherein the flexible contact element is not attached to the contact section when the female electrical terminal is mated with a complementary male terminal", FCI is seen to show the same structure that captures the contact element within the mating portion of the terminal and makes the recitation unpatentable.


-- In reference to the recitation "diameter" it is seen to be defined by a distance across any configuration ( see inserted definition below ).

## edge

**Robotics:** A line that marks the boundary of an object's image in machine vision.

**Mathematics:**

1. In graph theory, a member of one of two (usually finite) sets of elements that determine a graph; i.e., an element of the edge set. The other set is called the vertex set; each element of the edge set is determined by a pair of elements of the vertex set. Denoted  $uv$  if the edge is undirected and joins vertices  $u$  and  $v$  and denoted  $(u, v)$  if the edge is directed from vertex  $u$  to vertex  $v$ .
2. A straight line that is the intersection of two faces of a solid figure.
3. A boundary of a plane geometric figure.

Copyright © 1992, 1996 by Academic Press 

APA | MLA | Chicago : Citing this entry

edge. Academic Press Dictionary of Science and Technology (1992). Retrieved 15 July 2005, from xreferplus. <http://www.xreferplus.com/entry/3099168>

## diameter

**Mathematics**

1. A chord passing through and bisected by the center of a circle, conic, or solid of revolution generated by a conic. For example, a diameter of a parabola (which has its center at the point at infinity on its axis) is a ray  $d$  parallel to the axis of the parabola; it bisects chords parallel to the line tangent to the parabola at the endpoint of  $d$ .
2. The length of a diameter; the longest distance across a configuration; it may be infinite, as in the case of a parabola.
3. More generally, given a set  $S$  in a metric space, the value  $d[S] = \sup\{|s_1 - s_2| \}$ , for all points  $s_1$  and  $s_2$  in  $S$ . A set of finite diameter is said to be bounded. If  $S$  is both bounded and closed, then  $S$  contains two points  $s_1$  and  $s_2$  such that  $d[S] = |s_1 - s_2|$ .
4. The maximum of all of the distances between the vertices of a graph.

Copyright © 1992, 1996 by Academic Press

Citing this entry

diameter. Academic Press Dictionary of Science and Technology (1992). Retrieved 14 July 2005, from xreferplus. <http://www.xreferplus.com/entry/3095111>

***Response to Applicant's Remarks***

Applicant's arguments have been carefully considered. However, they are moot in view of the new grounds of rejection.

***Conclusion***

- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Harvey whose telephone number is 571-272-2007. The examiner can normally be reached between 8:00 A.M. To 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800 extension 33.

Art Unit: 2833

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2800.

- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James R. Harvey, Examiner

jrh  
July 15, 2005



**THO D.TA**  
**PRIMARY EXAMINER**